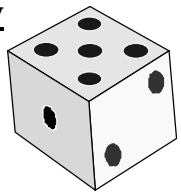
National 4 Expressions and Formulae Homework –Using probability

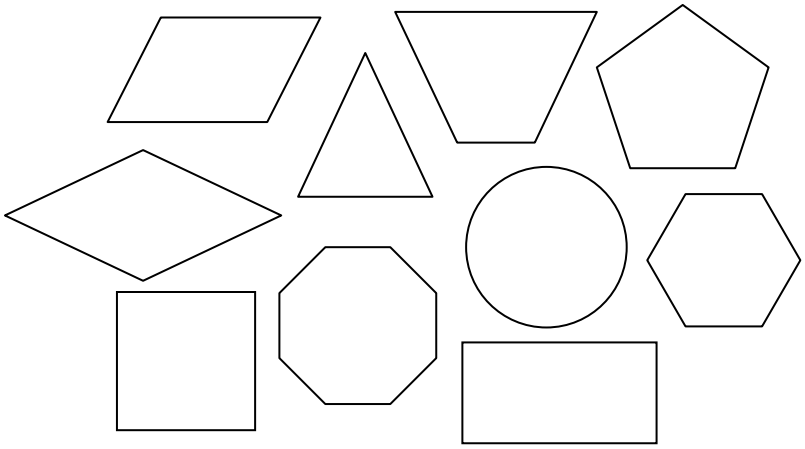


1. A die is rolled. Find the probability that it lands showing

(a) 5 **(b)** an even number

(c) a prime number **(d)** a multiple of 2 **(e)** a number less than 3 [5]

2. If one of these geometric shapes is picked at random, what is the probability that it has



(a) 4 sides **(b)** a centre of symmetry **(c)** more than 3 sides [3]

3. Darcy and her friend are playing with a pack of cards from which her maths teacher has confiscated the Ace of Clubs and the Queen of Diamonds.

What is the probability that the first card she deals is

(a) a 10 **(b)** a black card **(c)** a Jack **(d)** the 4 of hearts? [4]

4. A coin is tossed and a die thrown.

Copy and complete this table to show all the possible results: [2]

	1	2	3	4	5	6
Heads(H)			3H		5H	
Tails(T)	1T				5T	

What is the probability of getting: **(a)** Tails and an even number?

(b) Heads and a Multiple of 3? [2]

[16 marks]